

REMARKS/ARGUMENTS

Initially, Applicants would like to express their appreciation to the Examiner for the detailed Official Action provided, and for acknowledgement of Applicants' Information Disclosure Statement by return of the FORM PTO-1449. However, Applicants note that the Examiner has not acknowledged that the drawings are acceptable, and it is requested that the Examiner explicitly indicate the same in the next Official Action. Further, Applicant also notes that the Examiner has not acknowledged Applicants' Claim for Priority and receipt of the certified copy of the priority document, and it is requested that the Examiner indicate the same in the next Official Action.

Upon entry of the above amendments claims 1, 3, and 6-9, will have been amended, claim 2 will have been canceled (without prejudice or disclaimer to the subject matter contained therein), and claim 10 will have been added. Claims 1 and 3-10 are currently pending. Applicants respectfully request reconsideration of the outstanding objection and rejections, and allowance of all the claims pending in the present application.

In the Official Action, the Examiner has rejected claims 1-9 under 35 U.S.C. § 112, second paragraph for being indefinite. More particularly, the Examiner asserts that the recitation of both an apparatus and a process in claim 1 renders the scope of the claims indefinite. Applicants respectfully traverse the above-noted rejection. In this regard, Applicants submit that the term "process" has been used in an objective sense. For example, the recitation of a mounting process was intended to reference a place where mounting occurs.

Nevertheless, without acquiescing to the propriety of the above-noted rejection, Applicants have amended claim 1 (where appropriate) to replace the recitations of "process" with --station-- solely in order to advance prosecution of the present Application. In this regard, Applicants submit that at least Figure 1 of the drawings illustrates stations; therefore; no new matter is believed to have been added by the present amendment.

Further, the Examiner has also rejected claims 1-9 under 35 U.S.C. § 112, for omitting essential structural cooperative relationships of elements. More particularly, the Examiner asserts that the placement of the detector relative to the other parts of the transfer apparatus has been omitted. Further, in regard to dependent claims 3-5 and 7-9, the Examiner asserts that "a size relationship between a part of the transfer apparatus of the present invention and something that is not part of the apparatus may not be claimed because a person operating a similar device could be guilty of infringing such an apparatus claim depending on a method of using the apparatus rather than on the structure of the apparatus as is usually required for infringement of an apparatus claim" (see, page 3, paragraph 2 of the Official Action). Without acquiescing to the Examiner's rejection, as discussed supra, claim 1 has been amended solely in order to advance prosecution of the present Application. More particularly, Applicants submit that claim 1 recites that the detector is provided at the substrate discharge-waiting station.

In regard to the Examiner's assertion that Applicants may not claim a size relationship between a part of the transfer apparatus of the present invention and

something that is not part of the apparatus see, page 3, paragraph 2 of the Official Action), Applicants respectfully traverse the Examiner's rejection on this basis. In this regard, Applicants submit that because the substrate-continuity detecting sensor is configured to detect *when a following substrate, which immediately follows the transferred mounted substrate, has been transferred simultaneously with the transferred mounted substrate to the discharge-waiting station*, respective dependent claims which recite a functional relationship between the substrate-continuity detecting sensor and a size of the substrate are appropriate .

Further, Applicants submit that the Examiner has provided no legal basis in support of the aforementioned assertion; therefore, the Examiner is reminded that “[a] functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. [see, *Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1117-20, 72 USPQ2d 1001, 1006-08 (Fed. Cir. 2004)].

In this regard, Applicants are merely defining the location of the continuity-displacement detecting sensor based upon the size of the substrate. In other words, Applicants are not claiming the size of the substrate. Accordingly, the rejections of claims 1-9 under 35 U.S.C. § 112 is improper and should be withdrawn.

In the Official Action, the Examiner has rejected claims 1-4 and 6-9 under 35 U.S.C. §102(b) as being anticipated by JP Doc. No. 2000-118678 to SUZUKI.

Without acquiescing to the propriety of the Examiner's rejection, Applicants have amended independent claim 1 solely in order to expedite prosecution of the present application. In this regard, Applicants note that SUZUKI fails to teach or suggest the combination of elements as recited in claim

1. In particular, claim 1 sets forth a substrate transfer apparatus including, inter alia, wherein transfer of a mount-less substrate from the mounting-waiting station to the mounting station, and transfer of a mounted substrate, for which mounting has been done in the mounting station, from the mounting station to the substrate discharge-waiting station are performed simultaneously; and wherein a detector is provided at the substrate discharge-waiting station to detect when a plurality of substrates have been transferred into the substrate discharge-waiting station as part of the same transfer, the detector including a substrate-arrival detecting sensor configured to detect the transfer of the mounted substrate to the discharge-waiting station and a substrate-continuity detecting sensor provided upstream of the substrate-arrival detecting sensor, the substrate-continuity detecting sensor being located at a position so as to detect when a following substrate, which immediately follows the transferred mounted substrate, has been transferred simultaneously with the transferred mounted substrate, to the discharge-waiting station.

Applicants submit that SUZUKI lacks any disclosure of at least the above-noted combination of elements.

In this regard, the Examiner asserts that SUZUKI discloses a mounting conveyor (3), a waiting conveyor (2), and a discharge waiting conveyor (4). Further, the Examiner asserts that the sensors (7-9) provide a means for detecting that a plurality of substrates have been transferred into the discharge waiting conveyor at the same time (see, page 4, paragraph 4, of the Official Action). However, Applicants note that element 14 is actually an arrival detecting sensor (see, col. 16, line 34, of SUZUKI).

Further, contrary to the Examiner's assertions, SUZUKI is silent regarding detecting the simultaneous transfer of plurality of substrates to the discharge waiting station. Therefore, SUZUKI does not disclose at least a a detector is provided at the substrate discharge-waiting station to detect when a plurality of substrates have been transferred into the substrate discharge-waiting station as part of the same transfer, the detector including a substrate-arrival detecting sensor configured to detect the transfer of the mounted substrate to the discharge-waiting station and a substrate-continuity detecting sensor provided upstream of the substrate-arrival detecting sensor, the substrate-continuity detecting sensor being located at a position so as to detect when a following substrate, which immediately follows the transferred mounted substrate, has been transferred simultaneously with the transferred mounted substrate, to the discharge-waiting station.

Further, to the extent that the Examiner is relying on the European Patent Examiner's Opinion regarding novelty of the present invention, Applicants submit that, in many respects, the patent laws of foreign nations (i.e., including Europe)

are different than the patent laws of the United States. Accordingly, Applicants are entitled to an Examination of the present Application based upon United States law and Patent and Trademark Office regulations, which requires more than a mere reference to a foreign Authority. In this regard, should the Examiner decide to maintain the aforementioned grounds for rejection, Applicants respectfully request that the Examiner provide a translation of at least the relevant portions of SUZUKI, which the Examiner considers to anticipate the present claimed invention.

Additionally, the Examiner is reminded that "[a]bsent a disclosure in a single reference of each and every element recited in a claim, a *prima facie* case of anticipation cannot be made under 35 U.S.C. § 102." Since the applied reference fails to disclose each and every element recited in independent claim 1, as well as claims 2-9, dependent therefrom, these claims are not anticipated thereby. Further, all pending dependent claims recite additional features that further define the present invention over the prior art. Accordingly, the Examiner is respectfully requested to withdraw the rejection under 35 U.S.C. § 102 and allow all pending claims in the present application.

Further, should the Examiner consider rejecting the above-noted claims under 35 U.S.C. § 103, the Examiner is reminded that "[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a

reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In this regard, Applicants submit that the Examiner has not shown that the applied reference, or any other reference, disclose the present claimed substrate transfer apparatus. Moreover, the mere fact that references can be modified does not render the result obvious, unless the prior art suggests the desirability of the modification.

In regard to new independent claim 10, Applicants submit that claim 10 is somewhat similar to independent claim 1 in that it recites, inter alia, providing a detector at the substrate discharge-waiting station to detect when a plurality of substrates have been transferred into the substrate discharge-waiting station as part of the same transfer, the detector including a substrate-arrival detecting sensor configured to detect the transfer of the component mounted substrate to the discharge-waiting station and a substrate-continuity detecting sensor provided upstream of the substrate-arrival detecting sensor, the substrate-continuity detecting sensor being provided at a position so as to detect when a following substrate, which immediately follows the transferred mounted substrate, has been transferred simultaneously with the transferred mounted substrate to the discharge-waiting station; and arranging the substrate-continuity detecting sensor at a position that satisfies  $X < XS < 2X$ , where  $XS$  is a distance from the substrate-arrival detecting sensor to the substrate-continuity detecting sensor

and X is a substrate dimension in the substrate transfer direction. Accordingly, independent claim 10 is allowable for reasons at least generally similar to independent claim 1, as discussed above.

In the Official Action, the Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over SUZUKI.

Applicants respectfully traverse the above-noted rejection. In this regard, the Examiner acknowledges that SUZUKI does not disclose the substrate-continuity detecting sensor being automatically movable. Nevertheless, the Examiner takes the position that making the continuity-detecting sensor automatically movable is an obvious modification. However, Applicants submit that the Examiner hasn't provided any factual evidence in support of the aforementioned assertion. Further, as discussed supra, in order to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Accordingly, the rejection of claim 5 under 35 U.S.C. § 103(a) is improper and should be withdrawn. Additionally, should the Examiner decide to maintain the aforementioned grounds for rejection in any subsequent Official Action, Applicants respectfully request that the Examiner provide an appropriate teaching reference(s) indicating the same.

Applicants further submit that at least one advantage of the aforementioned feature is that, by providing a substrate-continuity detecting sensor constructed to be automatically movable to the position that satisfies  $X <$

XS < 2X, a substrate-continuity detecting sensor may be easily moved to detect substrates of varying sizes.

In view of the arguments herein, Applicants submit that independent claims 1 and 10 are in condition for allowance. With regard to dependent claims 2-9, Applicants assert that they are allowable on their own merit, as well as because they depend from independent claim 1, which Applicants have shown to be allowable.

Thus, it is respectfully submitted that all of the claims in the present application are clearly patentable over the references cited by the Examiner, either alone or in combination, and an indication to such effect is respectfully requested, in due course.

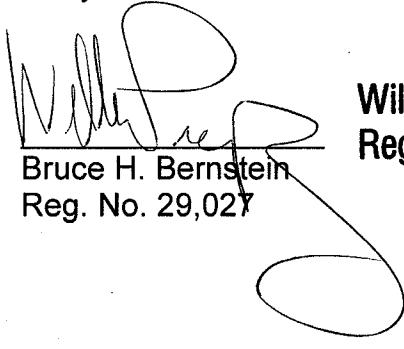
SUMMARY

Applicants submit that the present application is in condition for allowance, and respectfully request an indication to that effect. Applicants have argued the allowability of the claims and pointed out deficiencies of the applied references. Accordingly, reconsideration of the outstanding Official Action and allowance of the present application and all the claims therein are respectfully requested and is now believed to be appropriate.

Applicants note that this amendment is being made solely to advance prosecution of the application to allowance and should not be considered as surrendering equivalents of the territory between the claim prior to the present amendment and the amended claim. Further, no acquiescence as to the propriety of the Examiner's rejection is made by the present amendment. All amendments to the claims which have been made in this paper, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
Noriyuki TANI et al.

  
Bruce H. Bernstein  
Reg. No. 29,027

**William Pieprz**  
**Reg. No. 33630**

March 26, 2007  
GREENBLUM & BERNSTEIN, P.L.C.  
1941 Roland Clarke Place  
Reston, VA 20191  
(703) 716-1191